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File 7605

VERIFICATION OF TRANSLATION

I hereby declare and state that I am knowledgeable of each of the German and English languages and that I made and reviewed the attached translation of the International Preliminary Examination Report No. PCT/EP 03/02252 from the German language into the English language, and that I believe my attached translation to be accurate, true, and correct to the best of my knowledge and ability.

Date: May 20, 2004



Isabel A. Leonard
Translator

INTERNATIONAL PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant or Agent file number: Mic157wo	FURTHER ACTION	See notice of transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International File No: PCT/EP03/02252	International application date: (day/month/year): 05.03.2003	Priority date (day/month/year): 27.03.2002
International Patent Classification (IPC) or national classification and IPC: C12M1/34		
Applicant: MICRONAS MUNICH GMBH et al.		

1. This International Preliminary Examination Report has been issued by the authority responsible for international preliminary examination and is forwarded to the applicant under Article 36.
2. This REPORT has a total of 5 pages including this cover sheet.

☒ The Examination Report also includes ATTACHMENTS; these consist of sheets with specifications, claims, and/or drawings which were amended and form the basis for this report, and/or pages with corrections made by this authority (see Rule 70.16 and Section 607 of the PCT guidelines).

These attachments comprise a total of 1 pages.

3. This Examination Report contains information on the following points:

I	<input checked="" type="checkbox"/>	Basis of examination report
II	<input type="checkbox"/>	Priority
III	<input type="checkbox"/>	No opinion issued regarding novelty, inventive step, or industrial applicability
IV	<input type="checkbox"/>	Lack of uniformity of invention
V	<input checked="" type="checkbox"/>	Finding, with supportive reasoning according to Rule 66 2a)ii), regarding novelty, inventive step, and industrial applicability; documents and explanations in support of this finding
VI	<input type="checkbox"/>	Specific documents cited
VII	<input type="checkbox"/>	Specific flaws in international application
VIII	<input type="checkbox"/>	Specific comments on international application

Date application filed 27.10.2003	Issue date of this report 02.04.2004
Name and address of authority responsible for international preliminary examination: European Patent Office D-80298 Munich Tel. +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Clerk: Diez Schlereth, D. Tel. +49 89 2399-7488 [seal]

**INTERNATIONAL PRELIMINARY EXAMINATION
REPORT**

International Application Number PCT/EP03/02252

I. Basis of Report

1. Regarding the **components** of the international application (*replacement pages filed with the Application Office in response to a request under Article 14 are deemed "originally filed" in the context of this report and are not attached because they contain no amendments (Rules 70.16 and 70.17)*):

Specification, pages:

1-16 in the version originally filed

Claims, Nos.:

2-7, 9-17 in the version originally filed

1, 8 received on 13.03.2004 with letter of 11.03.2004

Drawings, pages:

1/4-4/4 in the version originally filed

2. Regarding **language**: All the components listed above are available to the authority in the language in which the international application was filed or were filed in this language unless otherwise stated below.

The components are available to the authority in language: or were filed in this language; these are:

- ☐ the language of the translation filed for purposes of the international search (according to Rule 23.1(b));
 - ☐ the language in which the international application was published (according to Rule 48.3(b)).
 - ☐ the language of the translation filed for purposes of the international preliminary examination (according to Rule 55.2 and/or 55.3).
3. Regarding the **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was conducted on the basis of the sequence protocol which:
- ☐ is contained in the international application in written form;
 - ☐ was filed together with the international application in computer-readable form;
 - ☐ was filed with the authority subsequently in written form;
 - ☐ was filed with the authority subsequently in computer-readable form;
 - ☐ the declaration that the sequence protocol subsequently filed in writing does not go beyond the disclosure content of the international application, at the time it was applied for, was submitted;
 - ☐ the declaration that the information entered in computer-readable form corresponds to the written sequence protocol was submitted.

4. Because of the amendments, the following documents no longer apply:

- ☐ specification pages:
- ☐ claims no.:
- ☐ drawings page:

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5. ☐ This report was issued without taking into account (some of) the amendments, as these, for the reasons stated, in the opinion of the authority go beyond the content disclosed in the version originally filed (Rule 70.2 c)).

(Reference should be made in Point 1 to replacement pages containing such amendments; they should be attached to this report).

6. Any additional remarks:

V. Finding with supporting reasons according to Article 35(2) regarding novelty, inventive step, and industrial applicability; documents and explanations in support of this finding.

1. Finding

Novelty (N) Yes: Claims 8-9, 11
 No: Claims 1-7, 10, 12-17

Inventive step (IS): Yes: Claims
 No: Claims 1-17

Industrial applicability: Yes: Claims 1-17
 No: Claims

2. Documents and explanations
see attachment

INTERNATIONAL PRELIMINARY EXAMINATION REPORT - ATTACHMENT

International Application Number PCT/EP03/02252

The statement of the applicant filed with the amended claims does not provide a reason for departing from the opinion already conveyed, due to the following:

The feature incorporated into Claim 1 “an excitation source *accepting a biological or chemical excitation medium for cells*” is to be interpreted as an ordinary container since the contents of a container do not necessarily lead to a difference in the shape of the container.

Moreover, inlet and outlet openings of flow cells are always connected(?) to any container.

Item V

1) Reference is made to the following documents:

D1: WO-A-98/08077

D2: WO-A-01/13096

D3: WO-A-01/43875

2) The subject of Claims 1-7, 10, and 12-17 is not novel under PCT Art. 33(2) for the following reasons.

D1 discloses a device for measuring luminescence, having a flow cell and a semiconducting carrier with integrated waveguides, interference filters, and associated photodetectors (see Figure 1; pages 10-13, 26-32). D1 anticipates the subject of Claims 1-7 in a manner prejudicial to novelty because the trapping molecules immobilized on the waveguide are also suitable for binding cells.

D2 and D3 disclose optical devices with a flow cell and a structured waveguide to “receive” the luminescence signal (see D2, pages 11-22, 26, and D3, Claims 1-103). D2 and D3 anticipate the subject of Claims 1, 10, and 12-17 in a manner prejudicial to novelty.

3) The subject of dependent Claims 8-9 and 11 is for the following reasons to be

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deemed novel (PCT Art. 33(2)) but not inventive under PCT Art. 33(3): the subject of these claims relates to slight structural changes in the device according to Claim 1 that lie within the realm of what an expert in the field normally does from considerations familiar to him, especially as the advantages achieved are immediately predictable.

Amended Claims 1 and 8

1. Device for detecting a luminescence event in, at, or in the immediate vicinity of a cell, a cell cluster, or a tissue, having the following features:

(a) a carrier element (1) with a surface (100) prepared for direct or indirect coupling of cells,

(b) at least one optical detector (2) for receiving a luminescence signal, integrated into the carrier element (1) below surface (100),

characterized by the following features:

(c) a cover (7) covering surface (100) to form a cavity (7), said cover having an inlet opening (8) and an outlet opening (9),

(d) an excitation source (21) connected to inlet opening (8) and accepting a biological or chemical excitation medium for cells.

8. Device according to Claim 6 or 7, in which the excitation source (21), controlled by the evaluation circuit, sends the chemical or biological excitation medium to the inlet opening (8).